

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claims 1-12 (Cancelled).

Claim 13 (Currently Amended): A method for controlling a computerized device by a multi-contact touch screen, the method comprising:

displaying a first and second graphical object ~~objects~~ on the multi-contact touch screen at ~~an~~ a first and second object position ~~positions, respectively;~~

associating a first and second specific processing rule ~~rules~~ to the first and second graphical ~~object~~ objects, respectively;

detecting ~~a plurality of~~ a first and second touch point ~~points~~ on the multi-contact touch screen and defining a first and second touch position ~~positions~~ for ~~each of the plurality of~~ a first and second touch points, respectively;

applying the first specific processing rule of the first graphical object as a function of a relative position between the first touch position and the first object position;

applying the second specific processing rule of the second graphical object as a function of a relative position between the second touch position and the second object position; ~~and~~

modifying at least one of the first graphical object or the first object position based on a result of said applying the first specific processing rule; ~~and~~

modifying at least one of the second graphical object or the second object position based on a result of said applying the second specific processing rule.

Claim 14 (Previously Presented): The method according to Claim 13, wherein said

step of detecting further comprises:

sequentially scanning rows and columns of the multi-contact touch screen.

Claim 15 (Currently Amended): The method according to Claim 13, wherein the calculating step further includes:

generating a ~~plurality of~~ first and second contact zones from the ~~plurality of~~ first and the second touch points;

first calculating a bounding zone for ~~each the~~ plurality of first and second contact zones; and

second calculating a ~~plurality of cursor positions~~ position for ~~each of the~~ plurality of first and second contact zones, ~~respectively~~.

Claim 16 (Currently Amended): The method according to Claim 15, wherein said step of second calculating further calculates the ~~plurality of cursor positions~~ position based on a barycenter of a ~~respective~~ the bounding zone.

Claim 17 (Cancelled).

Claim 18 (Previously Presented): The method according to Claim 13, wherein said step of detecting further comprises:

measuring an electrical characteristic of row-column intersections by sequentially scanning rows and columns of the multi-contact touch screen.

Claim 19 (Previously Presented): The method according to Claim 18, wherein said electrical characteristic is a voltage.

Claim 20 (Currently Amended): A device to control a computerized apparatus comprising:

memory to store ~~a plurality of~~ first and second graphical objects and ~~a plurality of first and second specific~~ processing rules that are associated to the ~~plurality of first and the second~~ graphical objects, respectively;

a multi-contact touch screen to detect ~~a plurality of~~ first and second touch points on the multi-contact touch screen and defining a first and a second touch position for ~~each of the plurality of the first and the second~~ touch points, respectively;

a graphic display unit to display ~~a the first and second graphical objects~~ object from said plurality of graphical objects at an a first and a second object position, respectively; and

a processor configured to apply ~~the first specific~~ processing rule of the plurality of processing rules associated to the first graphical object as a function of a relative position of between the first touch position and the first object position, configured to apply the second specific processing rule associated to the second graphical object as a function of a relative position between the second touch position and the second object position, ~~and~~ configured to modify at least one of the first graphical object or the first object position based on a result of said processing said first specific processing rule, and configured to modify at least one of the second graphical object or the second object position based on a result of said processing said second specific processing rule.

Claim 21 (Previously Presented): The device according to Claim 20, wherein the multi-contact touch screen comprises:

a transparent matrix sensor.

Claim 22 (Previously Presented): The device according to Claim 21, wherein the

transparent matrix sensor includes an array of a plurality of conductive rows and columns.

Claim 23 (Previously Presented): The device according to Claim 22, wherein the conductive rows and columns are made of Indium Tin Oxyde (ITO).

Claim 24 (Previously Presented): The device according to Claim 22, wherein the conductive rows are insulated from the conductive columns by an insulation layer.

Claim 25 (Currently Amended): The device according to Claim 20, further comprising:

a controller configured to sequentially scan rows and columns of the matrix sensor to measure an electrical characteristic of row-column intersections to detect the ~~plurality of~~ first and the second touch points.

Claim 26 (Previously Presented): The device according to Claim 25, wherein the electrical characteristic of row-column intersections is a voltage.

Claim 27 (Currently Amended): The device according to Claim 20, wherein the processor is further configured to generate ~~a plurality of~~ first and second contact zones from the ~~plurality of first and second touch points, respectively~~ positional information, configured to calculate a bounding zone for ~~each of the plurality of contact zones~~ the first and second contact zone, and configured to calculate ~~a cursor positions~~ position for ~~each of the plurality of the contact zones~~ zone, respectively.

Claim 28 (Currently Amended): The device according to Claim 27, wherein said

processor is further configured to calculate the cursor ~~positions~~ position based on a barycenter of ~~a respective~~ the bounding zone.

Claim 29 (Withdrawn): A touch panel, comprising:

a transparent sensor having a plurality of sensing zones, the zones arranged in a matrix;

a scanning unit configured to detect a tactile activation of at least two of said plurality of sensing zones; and

a processing unit configured to determine whether the at least two zones are adjacent to each other in the matrix, and to calculate a location of the tactile activation on the touch panel associated with the at least two adjacent zones.

Claim 30 (Withdrawn): A touch panel, comprising:

a transparent sensor having a plurality of sensing zones, the zones arranged in a matrix;

a scanning unit configured to detect simultaneous tactile activation on the touch panel to sense at least two clusters of zones of said plurality of sensing zones; and

a processing unit configured to calculate a location for each of the at least two clusters of zones, respectively, each calculated location representing a position of one of the simultaneous tactile activation on the touch panel that forms one of the at least two clusters.

Claim 31 (Withdrawn): The touch panel according to Claim 30, wherein the processing unit is further configured to calculate a bounding zone around each of said at least two clusters, each cluster surrounded by a bounding zone, and configured to calculate said location of one of the simultaneous tactile activation based on the bounding zone.

Claim 32 (New): The method according to Claim 13,
wherein the first specific processing rule is different from the second specific processing rule, and the first specific processing rule is not applied to the second graphical object.

Claim 33 (New): The device according to Claim 20,
wherein the first specific processing rule is different from the second specific processing rule, and the first specific processing rule is not applied to the second graphical object.

Claim 34 (New): The method according to Claim 13, wherein the first specific processing rule defines an interaction law between a cursor and the first graphical object.

Claim 35 (New): The method according to Claim 34, wherein the interaction law includes a physical law.

Claim 36 (New): The method according to Claim 35, wherein the physical law is a spring-loaded system.

Claim 37 (New): The method according to Claim 35, wherein the physical law is a vibration of a string.

Claim 38 (New): The method according to Claim 35, wherein the physical law is a law of gravity associated to the first graphical object.

Claim 39 (New): The method according to Claim 35, wherein the physical law is an electromagnetic law.

Claim 40 (New): The method according to Claim 35, wherein the physical law is a principle of inertia.

Claim 41 (New): The method according to Claim 35, wherein the physical law manages a collision between the first and second graphical object.

Claim 42 (New): The method according to Claim 35, wherein the interaction law includes interaction between the first graphical object and another graphical object, the first graphical object located inside the another graphical object.

Claim 43 (New): The method according to Claim 42, wherein the interaction between the first graphical object inside the another graphical object is based on a coefficient of friction.

Claim 44 (New): The method according to Claim 42, wherein the interaction between the first graphical object inside the another graphical object is based on a rebound.

Claim 45 (New): The method according to Claim 42, wherein the interaction between the first graphical object inside the another graphical object is based on an attraction.

Claim 46 (New): The method according to Claim 13, wherein the first specific processing rule includes a pressure measurement.

Claim 47 (New): The method according to Claim 13, wherein the first specific processing rule takes into account a speed of a movement of the first touch position relative to the multi-contact touch screen.

Claim 48 (New): The method according to Claim 13, wherein the first specific processing rule takes into account an acceleration of a movement of the first touch position relative to the multi-contact touch screen.

Claim 49 (New): The method according to Claim 13, wherein the first specific processing rule takes into account a trajectory of a movement of the first touch position.

Claim 50 (New): The method according to Claim 49, wherein the first specific processing rule performs a shape recognition of the trajectory of the movement of the first touch position.

Claim 51 (New): The device according to Claim 20, further comprising:
a switch configured to switch between a graphical user interface that includes the first and the second graphical objects, to another graphical user interface.

Claim 52 (New): The device according to Claim 51, wherein the switch is a button.

Claim 53 (New): The device according to Claim 51, wherein the switch is a control pedal board.

Claim 54 (New): A method for controlling a computerized device by a multi-contact touch screen, the method comprising:

displaying first and second graphical objects on the multi-contact touch screen at first and second object positions, respectively;

associating first and second specific processing rules to the first and second graphical objects, respectively;

detecting a touch zone including first and second touch points on the multi-contact touch screen and defining a zone position for the touch zone based on a location of both the first and second touch points;

detecting a third touch point on the multi-contact touch screen and defining a touch position for the third touch point;

applying the first specific processing rule of the first graphical object as a function of a relative position between the zone position and the first object position;

applying the second specific processing rule of the second graphical object as a function of a relative position between the touch position and the second object position;

modifying at least one of the first graphical object or the first object position based on a result of said applying the first specific processing rule; and

modifying at least one of the second graphical object or the second object position based on a result of said applying the second specific processing rule.